

# DIMENSIONS

OFFICIAL NEWSLETTER OF RSET MATH CLUB 2023 - 2024



## DEPARTMENT OF MATHEMATICS

The Department of Mathematics at RSET was previously part of the Department of Basic Sciences & Humanities but became independent on June 22, 2020, to promote research and interdisciplinary projects. It offers courses in Mathematics for B.Tech and M.Tech programs and is a recognized research center for PhD programs under APJ Abdul Kalam Technological University, Kerala. The department aims to equip engineers with strong mathematical backgrounds and problem-solving skills through systematic training and research. It also hosts the Center for Topology and Applications (CETA), supported by prestigious organizations like the National Board of Higher Mathematics and the Department of Atomic Energy, Government of India.



**The Abel Prize 2023:  
Luis A. Caffarelli**

Luis A. Caffarelli being awarded the 2023 Abel Prize is indeed significant news for mathematicians. The Abel Prize is one of the most prestigious awards in mathematics, often likened to the Nobel Prize in the field. Caffarelli's recognition for his seminal contributions to regularity theory for nonlinear partial differential equations, including free-boundary problems and the Monge–Ampère equation, highlights the profound impact of his work on advancing our understanding of complex mathematical concepts and their applications. This recognition not only celebrates Caffarelli's remarkable achievements but also underscores the importance of his contributions to the broader

## INTERNATIONAL CONFERENCE ON MATHEMATICS FOR DATA SCIENCE & DYNAMICS-2024



*"Wherever there is number, there is beauty" -- Proclus*

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## MATHS CLUB

The RSET Mathematics Club is dedicated to enhancing the mathematical skills and acumen of students. Open to all students with a keen interest in mathematics, the club offers a variety of activities aimed at fostering mathematical proficiency. These activities include quizzes, Game Jams, Logic Quest, Treasure Hunt, workshops, and more. Additionally, the club regularly organizes inter-collegiate mathematics quiz competitions throughout the year, providing opportunities for students to engage with mathematics beyond the classroom and to showcase their talents on a broader platform.

## DR. JAYA ABRAHAM MEMORIAL EVER ROLLING TROPHY

The Mathematics Department of RSET renamed the 20<sup>th</sup> All Kerala Mathematics Quiz Competition as the "Dr. Jaya Abraham Memorial All Kerala Mathematics Quiz Competition" in memory of Dr. Jaya Abraham, a former faculty member of the Mathematics Department. This renaming is a tribute to Dr. Jaya's legacy and contributions to both the department and the field of mathematics, serving as a way to commemorate and honor their memory.



## MATHS CLUB ACTIVITIES

### 19<sup>th</sup> All Kerala Intercollegiate Mathematics Quiz Competition and National Level Puzzle Competition

Department of Mathematics & Mathematics Club conducted 19<sup>th</sup> All Kerala Intercollegiate Mathematics Quiz Competition and National Level Puzzle Competition on 21<sup>st</sup> January 2023.

### International Day of Mathematics

Department of Mathematics in association with International Mathematical Union Mathematics conducted a Comic Challenge as the Part of International Day of Mathematics on 10<sup>th</sup> march 2023

### Mathematics Week

The RSET Mathematics club celebrated "Mathematics Week", to commemorate the contribution of the legendary Indian mathematician, Srinivasa Ramanujan, from 18<sup>th</sup> – 24<sup>th</sup> December 2023. The winners of various events are as follows:

#### "Faces of infinity": A Portraiture competition

1<sup>st</sup> Prize - Adithya Raj S3 AD

2<sup>nd</sup> Prize - Celine Sony S3 AEI

3<sup>rd</sup> Prize - Karutikaran Shaun Antony S1 ME B

#### Poster making competition on the topic: "Ramanujan's Mathematical legacy"

1<sup>st</sup> Prize - Celine Sony S3 AEI

#### "Infinite insights challenge": Quiz Competition

1<sup>st</sup> Prize - Sahanaa Srinivasan S3 AD

2<sup>nd</sup> Prize - Devika Rajendran S3 AD

3<sup>rd</sup> Prize - Anna Merin Sunil S3 AD

## ACHIEVEMENTS

RSET Mathematics club team won the third place for the All Kerala Inter Collegiate Mathematics Quiz 2023 conducted by Toc H. Team members are Job Biju Cherian and Naseem K K from S1 EE.



Sourav V P



Shine Daniel

RSET Mathematics club team won the second place for the All Kerala Inter Collegiate Mathematics Quiz 2023 conducted by St Peters College, Kolenchery. Team members are Sourav V P and Shine Daniel from S1 EC C.



Rvyan Safar



Naveen Jose Kurian

RSET Mathematics club team won the second place for Treasure Hunt in MANTRA 2024 Fest conducted by Sacred Heart College, Thevara. Team members are Sourav VP, Rvyan Safar, Naveen Jose Kurian, Shine Daniel from S1 EC-C.

## UPDATES

### New chip opens door to AI computing at light speed

Engineers have developed a new chip that uses light waves, rather than electricity, to perform the complex math essential to training AI. The chip has the potential to radically accelerate the processing speed of computers while also reducing their energy consumption.

Source: University of Pennsylvania School of Engineering and Applied Science

### Use of decimal point is 1.5 centuries older than historians thought

A mathematical historian at Trinity Wester University in Canada, has found use of a decimal point by a Venetian merchant 150 years before its first known use by German mathematician Christopher Clavius. In his paper published in the journal *Historia Mathematica*, Glen Van Brummelen describes how he found the evidence of decimal use in a volume called "Tabulae," and its significance to the history of mathematics.